

Work Order ID 148513

148513

Page 1

July 04, 2016 10:18:07 AM

Item ID: D117-762-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube
 Start Date: 7/4/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 7/28/2016 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: Sub Date: 7/4/16 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3582	C

100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D117-762-041	CHG002							

DAS
28
9-89

JUL 26 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Item ID: D117-762-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 7/4/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/28/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

0.00

130

Skidtubes

0.20

Skidtubes

Memo

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 *** OPEN AFT CAP HOLE TO .187" ***

4-Locate DT 8973 from aft cap holes & Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole, then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8900

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

BE 16-07-05

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Skidtubes	0.00							
140	Memo	0.14							
Skidtubes	1-Weld fwd cap D2964 per dwg D3582 and QSI 004 A/R AL ROD Batch: <i>m131562/m 134826</i> 2-Grind flush								
150	QC10- Inspect visual per QSI004- ground welds	0.00							
150	Memo	0.00							
QC									
Quality Control									DAS 9 9-89
160	QC5- Inspect part completeness to step on W/O	0.00							
160	Memo	0.00							
QC									
Quality Control									DAS 9 9-89

1 8 8816-0705

D 1607-06

D 1608-06

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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OTHER : ☐									

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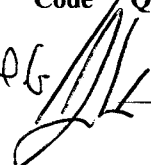
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.07	#66-16-7-6 NG 						
180 *180* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.00	1 0 16-0707 						

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18
8-09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Root Cause		FAULT CATEGORY																							
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OTHER : ☐																									

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Item ID: D117-762-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 7/4/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/28/2016 Req'd Qty: 1.00 ***1*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* Skidtubes	Skidtubes	0.00							
	Memo	0.15							
	1-Open X-Bolt holes to finish size as per Dwg D3582, all sections								
	2-Counter Sink X-BOLT holes as per Dwg D3582								
	3-Deburr and blow out chips from inside of tube, prep. tube for welding.								
	4-Bond web as per Dwg D3582 & QSI 015 A/R 241 Sike Flex Batch: <u>134743</u> Exp Date: <u>16-17-8</u>								
	5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B. A/R AL ROD Batch: <u>M134502</u>								
	6-Grind welds flush								
200 *200* QC	QC10- Inspect visual per QSI004- ground welds	0.00							
	Memo	0.00							
	Quality Control								

16-7-7
 16-7-7 M.G.
 7BE16-07-11

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JUL 11 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	QC3- Inspect Part Finish	0.00							
230									
QC	Memo	0.00							
Quality Control									
250		0.00							
250	HandFinishing								
HandFinish	Memo	0.26							
Hand Finishing	1-Inspect for Foreign objects								
	2-Install Aft cap as per Dwg D3582, Detail "C"								
	A/R 241 Sika Flex Batch: <u>11134743</u>								
	Exp Date: <u>16112</u>								
	3-Install Wearplates as per Dwg D3582,								
	Note:Install Bolt and washer on Ground Wire inserts on top of tube see								
	section D-D of dwg D3582								
	*****Do not install bolts where indicated on Dwg(Note #6)*****								
	A/R 241 Sika Flex Batch: <u>11134743</u>								
	Exp Date: <u>16112</u>								
	4- Wing Walk as per Dwg D3582 and QSI 005 4.4								

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DQA: _____ Date: _____

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								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

Work Order ID 148513

148513

Page 8

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Item ID: D117-762-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube
 Start Date: 7/4/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 7/28/2016 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
260						1			JUL 25 2016
QC	Memo	0.00							
Quality Control									
270	Packaging	0.00							DAS 28 9-89
270						/X			JUL 26 2016
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-762-041 Location :FG081								
	ppp148510								
280	QC21- Final Inspection - Work Order Release	0.00							DAS 21 9-89
280									JUL 26 2016
QC	Memo	0.02							
Quality Control									

DAS
21
9-89

JUL 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐				Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐											
		OTHER : _____																							

Picklist Print

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Page 1

Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A07.06.11New Issue EC
IPP Rev:B 08-02-22 change to revA as per dwg DD verF by:EC IPP REV:C
15.06.11 AS PER CHG002 DD VERF:JLM IPP REV:D 16.02.05
DWG REV.C (ecn16-514) DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3582-1-BENT		Manufactured	No			130	Each	4.0000	1	1			
D3582-1-BFNT									**			BE16-07-04	
Skidtube Assembly BK117													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					LG002			4					
					143511			4					
D2964		Manufactured	No			140	Each	12.0000	1	1			
D2964									**			BE16-07-05	
Cap													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					LG001			12					
					144041			12					
D2971		Manufactured	No			190	Each	13.0000	1	1			
D2971									**			BE16-07-11	
Cross Bolt Spacer													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					LG001			13					
					108778			13					
D2965		Manufactured	No			250	Each	68.0000	1	1			
D2965									**			BE16-07-21	
Cap													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					FP001			68					
					127852			68					

Picklist Print

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

D2973 Manufactured No 190 Each 58.0000 2 2

D2973

Cross Bolt Spacer

BE 16-07-11

Location

Loc Qty

Loc Code

LG001

58

123939

2

144627

56

2

D3584-1 Manufactured No 190 Each 1.0000 1 1

D3584-1

Web

16-7-7 M.G

Location

Loc Qty

Loc Code

LG002

1

145695

1

143512

1

D3662-3 Manufactured No 190 Each 80.0000 1 1

D3662-3

Crossbolt Spacer

BE 16-07-11

Location

Loc Qty

Loc Code

LG001

80

105725

26

71026

7

81606

47

1

D3662-1 Manufactured No 190 Each 35.0000 3 3

D3662-1

Crossbolt Spacer

BE 16-07-11

Location

Loc Qty

Loc Code

LG001

35

143517

35

3

Picklist Print

July 04, 2016 10:18:11 AM

Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130 AELS4-1032-130 Purchased No

Each 2,938.000 36

AI S4-1032-130

Rivnut

Location	Loc Qty	Loc Code
CCK005	1596	
M134502	1596	
FP001	352	
M133077	122	
M134502	230	
ST556	990	X36
M134502	990	

ALS4-428-165 Purchased No

Each 61.0000 2

AI S4-428-165

INSERT

Location	Loc Qty	Loc Code
FG	10	
117769	10	
FP001	51	
117769	51	X2

D3508-3 Manufactured No

250 Each 8.0000 1 1

D3508-3

Wearplate Fwd Center

Location	Loc Qty	Loc Code
FP002	8	
144501	8	X1

D3508-9 Manufactured No

250 Each 4.0000 1 1

D3508-9

Wearplate Fwd

Location	Loc Qty	Loc Code
FP002	4	
142291	4	X1

Picklist Print

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

D3558-3 Manufactured No 250 Each 31.0000 1 1

D3558-3

Gasket Center Fwd

lll 16/07/21

Location

Loc Qty

Loc Code

FG

1

89649

1

FP001

30

144377

30

xl

D3558-9 Manufactured No 250 Each 5.0000 1 1

D3558-9

Gasket Fwd

lll 16/07/21

Location

Loc Qty

Loc Code

FG

1

80340

1

FP001

4

138443

4

xl

D3558-11 Manufactured No 250 Each 5.0000 1 1

D3558-11

Gasket Aft Center

lll 16/07/21

Location

Loc Qty

Loc Code

FG

1

80339

1

FP001

4

138403

4

xl

Picklist Print

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

D3558-13

Manufactured No

250

Each

18.0000

1

1

D3558-13******

Gasket Aft

all 16/07/20LocationLoc QtyLoc Code

FG

1

82380

1

FP001

17

138669

17

81

D3508-11

Manufactured No

250

Each

4.0000

1

1

D3508-11******

Wearplate Aft Center

all 16/07/20LocationLoc QtyLoc Code

FP002

4

138044

4

81

D3508-13

Manufactured No

250

Each

25.0000

1

1

D3508-13******

Wearplate Aft

all 16/07/20LocationLoc QtyLoc Code

FP001

25

143628

25

81

Picklist Print

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

250

Each

1,964.000

2

2

NAS1149D0332.J

all 16/07/21

Washer

Location

Loc Qty

Loc Code

CA

6

m129682

6

GA

987

m135046

987

ST260a

564

m134848

564

x2

ST264

407

m134502

16

m134738

391

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Shop Packet Print

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Picklist Print

Page 7

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

250

Each

1,859.000

28

28

AN3C4A

lll 10/07/21

Bolt

Location

Loc Qty

Loc Code

FG

20

122814

20

FP001

333

M133440

7

M134396

41

M134509

6

M134606

29

M134676

44

M134762

206

OVER002

1400

M134861

200

M135058

1200

ST350

106

M131420

6

M132317

3

M134134

18

M134396

79

128

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Shop Packet Print

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Picklist Print

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Page 8

Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

250

Each

1,188.000

2

2

AN3C5A

Bolt

all 14/07/20

Location

Loc Qty

Loc Code

FG

5

122800

5

FP001

488

M134502

488

x2

OVER002

300

M134955

300

ST350

395

M133234

1

M134676

394

NAS1149D0416J

Purchased

No

250

Each

3,973.000

2

2

NAS1149D0416.J

WASHER

all 14/07/20

Location

Loc Qty

Loc Code

GA

119

m131511

119

ST260a

1984

m131511

1984

x2

ST264

1870

m131511

1870

Picklist Print

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Work Order ID: 148513

148513

Parent Item: D117-762-041

D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/4/2016

Required Date: 7/28/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

250

Each

5,434.000

28

28

NAS1149C0332R

WASHER

all 16/07/21

Location

Loc Qty

Loc Code

FP001

1504

m132930

1004

m134073

128

m134962

372

GA

141

m133284

141

ST266

3789

m134736

1789

m135046

2000

x28

AN4-4A

Purchased

No

250

Each

142.0000

2

2

AN4-4A

BOLT

all 16/07/21

Location

Loc Qty

Loc Code

FP001

2

m125709

2

ST346

140

m129390

140

x2

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

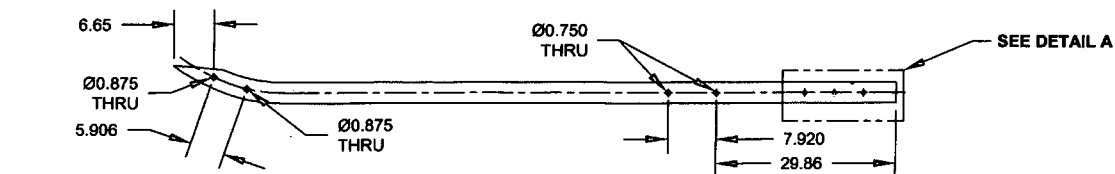
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	NAS1149C0332R	WASHER (AN960C10L)
2	NAS1149D0332J	WASHER (AN960D10L)
2	NAS1149D0416J	WASHER (AN960D416L)

NOTES:

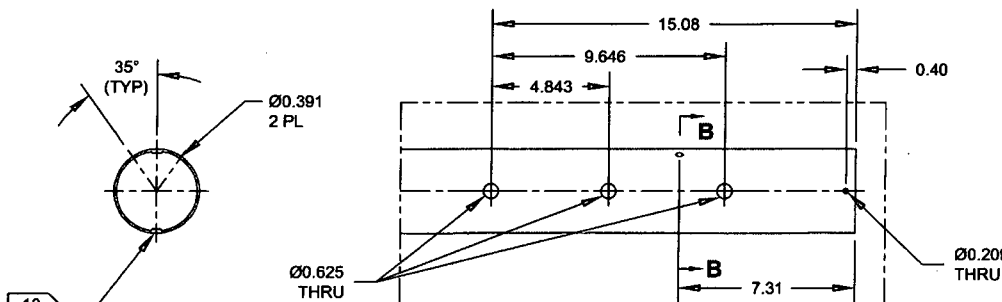
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 17.5 lbs
- 8) WELDING: PER DART QSI 004.
- 9) INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 10) USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/291.
- 11) DO NOT INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS IN INDICATED LOCATIONS.



D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



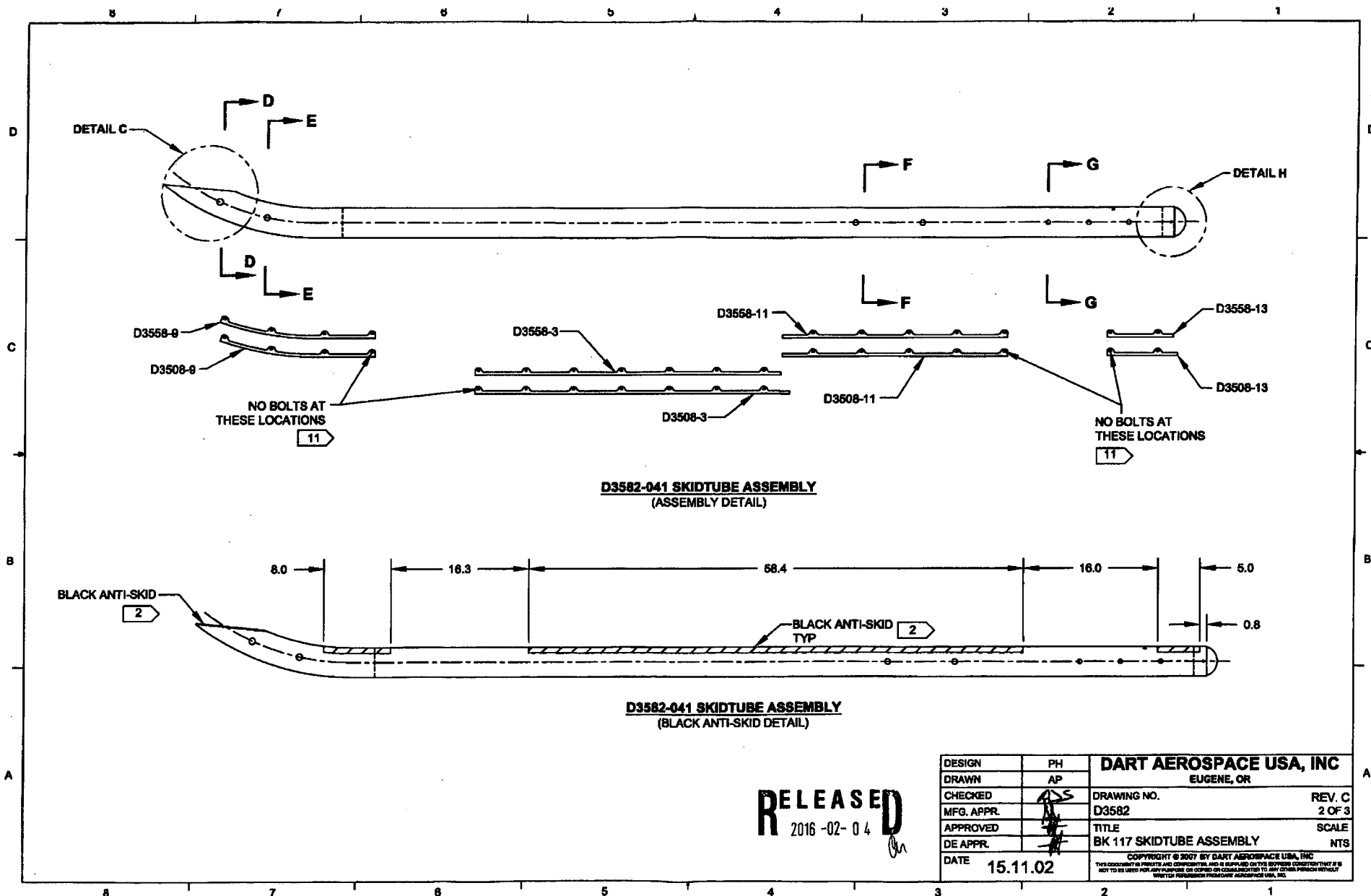
SECTION B-B
SCALE 5X

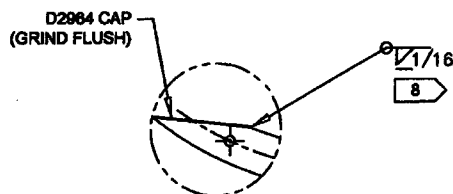
DETAIL A
SCALE 5X

C	D3492 PLUG ASSEMBLIES REMOVED. REFORMAT NOTES SHT 1	AP	15.11.02
B	29.86 WAS 29.87 (ZN C2-1), INCORPORATED DEO D3582-A-1 (ZN D5-1), FORMAT TO CURRENT STD	RF	15.02.20
A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC EUGENE, OR	
DRAWN	AP		
CHECKED	AP	DRAWING NO.	REV: C
MFG. APPR.	AP	D3582	1 OF 3
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BK 117 SKIDTUBE ASSEMBLY	NTS
DATE	15.11.02	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

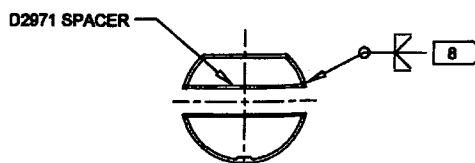
7/4/16
148513 SH

RELEASED
2016-02-04
ECN 16-514



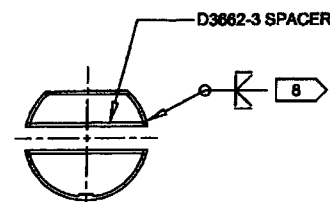


DETAIL C



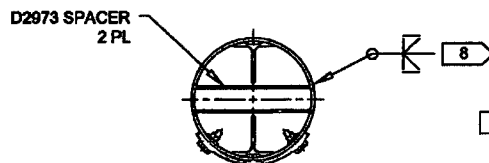
SECTION D-D
SCALE 3X

- SECTION D-D NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D2971 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER



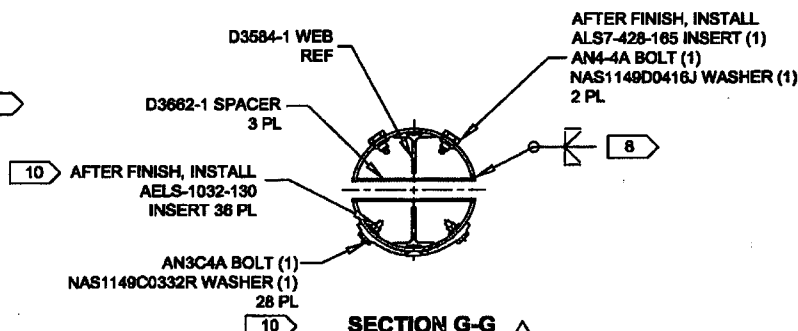
SECTION E-E
SCALE 3X

- SECTION E-E NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3662-3 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER



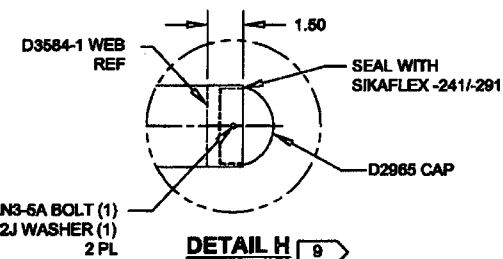
SECTION F-F
SCALE 3X

- SECTION F-F NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D2973 SPACER (2 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER



SECTION G-G
SCALE 3X

- SECTION G-G NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3662-1 SPACER (3 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER



DETAIL H

RELEASED
2016-02-04

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	RF	EUGENE, OR	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	MA	D3582	3 OF 3
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	BK 117 SKIDTUBE ASSEMBLY	NTS
DATE	15.11.02	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.	

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